

DETAILED ACTION

This Office Action is in response to the Applicants' communication filed (amendment) on 14 July 2009. In virtue of this communication, Claims 1-14 are currently presented in the instant application.

RESPONSE TO ARGUMENTS

1. Applicant's arguments, see Applicant's Remarks, filed 14 July 2009, with respect to the teachings of Masahiro et al. (JP 2003-330436) and Masaki (JP 2002-271337) and the removal of the HP 2400 Series Printer as available prior art have been fully considered and are persuasive. The rejections of Claims 1-13 have been withdrawn accordingly.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Andrew Dunlap on 20 November 2009 at 11:00 AM EST.

The application has been amended as follows:

In the Claims:

- *With respect to Claim 10:* In Lines 6-10, “the plurality of image generating apparatuses, said image generating apparatus comprising: a receiving unit operable to receive information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus;” has been replaced with --the plurality of image generating apparatuses, each of said image generating apparatuses comprising: a receiving unit operable to receive, from the image projecting apparatus, information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus;--; and
- *With respect to Claim 11:* In Lines 9-10, “a receiving step of receiving information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus,” has been replaced with -- a receiving step of receiving, from the image projecting apparatus, information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus;--; and

REASONS FOR ALLOWANCE

4. Claims 1-14 are allowed.
5. The following is an examiner’s statement of reasons for allowance:

With respect to Claims 1, 9, and 14, a plurality of image generating systems in communication with an image projecting apparatus projecting a composite representation of the

images provided by the plurality of image generating systems, wherein the image projecting apparatus includes “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses”, “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit”, and “a transmitting unit operable to transmit the information generated by said beacon generating unit to said plurality of image generating apparatuses” and wherein each image generating apparatus of said plurality of image generating apparatuses includes “a receiving unit operable to receive the information transmitted from said transmitting unit”, “an analyzing unit operable to analyze the information received by said receiving unit”, and “a display unit operable to display whether or not said image projection apparatus can project the respective image generated by said respective image generating apparatus of said plurality of image generating apparatuses, based on a result of the analysis of said analyzing unit”, or the variant of the associated method (Claim 9) or display device (Claim 14), renders the claim allowable.

While Masaki (JP 2002-271337) teaches a system comprising a plurality of external systems (printers) and a single image generating device in radio communication and that each of the external systems comprises a monitoring system for registering the status of said radio communication between the external devices and the image generating system and transmitting said status to the image generating system, it fails to teach or reasonably suggest that the system be applied in a system comprising single projector and a plurality of image generating apparatuses such that each of the plurality of image generating apparatuses comprises at least “an analyzing unit operable to analyze the information received by said receiving unit” and “a

display unit operable to display whether or not said image projection apparatus can project the respective image generated by said respective image generating apparatus of said plurality of image generating apparatuses, based on a result of the analysis of said analyzing unit”.

While Masahiro et al. (JP 2003-330436) teaches a projector receiving instructions for the projection of a composite image from a plurality of external image generating systems, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating apparatus each have at least “a display unit” operable to display said information from the projector to the user.

While Nagano et al. (Pub. No.: US 2004/0130568 A1) teaches a network interactive display device having a plurality of image generating systems and a projector device for projecting a composite image of the images generated by said image generating systems and a connection status management system, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating apparatus each have at least “a display unit” operable to display said information from the projector to the user.

Based on the above evidence, as several representatives of the closest prior art of record, Examiner judges that the prior art of record fails to reasonably suggest, alone or in combination, the above cited limitation of Claims 1, 9, and 14, rendering said claim allowable.

With respect to Claim 7, a plurality of image generating systems in communication with an image projecting apparatus projecting a composite representation of the images provided by the plurality of image generating systems, wherein the image projecting apparatus includes “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses”, “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit”, “a transmitting unit operable to transmit the information generated by said beacon generating unit to said plurality of image generating apparatuses”, “an ID assignment unit operable to assign a unique identifier to identify said image projecting apparatus”, “a confirmation packet receiving unit operable to receive a confirmation packet inquiring about a location of said image projecting apparatus”, and “a response output unit operable to output a response to the reception of the confirmation packet upon receiving the confirmation packet”, wherein “said beacon generating unit is operable to generate the information to include the unique identifier” and wherein each image generating apparatus of said plurality of image generating apparatuses includes “a receiving unit operable to receive the information transmitted from said transmitting unit”, “an analyzing unit operable to analyze the information received by said receiving unit”, “a display unit operable to display a result of the analysis of said analyzing unit”, and “an inquiry unit operable to accept the unique identifier of said image

projecting apparatus, to generate the confirmation packet, and to transmit the generated confirmation packet to said image projecting apparatus having the unique identifier” renders the claim allowable.

While Masaki (JP 2002-271337) teaches a system comprising a plurality of external systems (printers) and a single image generating device in radio communication and that each of the external systems comprises a monitoring system for registering the status of said radio communication between the external devices and the image generating system and transmitting said status to the image generating system, it fails to teach or reasonably suggest that the system be applied in a system comprising single projector and a plurality of image generating apparatuses such that each of the plurality of image generating apparatuses comprises at least “an analyzing unit operable to analyze the information received by said receiving unit” and “a display unit operable to display whether or not said image projection apparatus can project the respective image generated by said respective image generating apparatus of said plurality of image generating apparatuses, based on a result of the analysis of said analyzing unit”.

While Masahiro et al. (JP 2003-330436) teaches a projector receiving instructions for the projection of a composite image from a plurality of external image generating systems, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating

apparatus each have at least “a display unit” operable to display said information from the projector to the user.

While Nagano et al. (Pub. No.: US 2004/0130568 A1) teaches a network interactive display device having a plurality of image generating systems and a projector device for projecting a composite image of the images generated by said image generating systems an a connection status management system, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating apparatus each have at least “a display unit” operable to display said information from the projector to the user.

Based on the above evidence, as several representatives of the closest prior art of record, Examiner judges that the prior art of record fails to reasonably suggest, alone or in combination, the above cited limitation of Claim 7, rendering said claim allowable.

With respect to Claims 10-11, a plurality of image generating systems in communication with an image projecting apparatus projecting a composite representation of the images provided by the plurality of image generating systems, wherein each image generating apparatus of said plurality of image generating apparatuses includes “a receiving unit operable to receive, from the image projecting apparatus, information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus”, “an

analyzing unit operable to analyze the information received by said receiving unit”, and “a display unit operable to display whether or not said image projection apparatus can project the respective image generated by said respective image generating apparatus of said plurality of image generating apparatuses, based on a result of the analysis of said analyzing unit”, or the associated system having computer-readable medium executing a program operable to execute the above steps, renders the claim allowable.

While Masaki (JP 2002-271337) teaches a system comprising a plurality of external systems (printers) and a single image generating device in radio communication and that each of the external systems comprises a monitoring system for registering the status of said radio communication between the external devices and the image generating system and transmitting said status to the image generating system, it fails to teach or reasonably suggest that the system be applied in a system comprising single projector and a plurality of image generating apparatuses such that each of the plurality of image generating apparatuses comprises at least “an analyzing unit operable to analyze the information received by said receiving unit” and “a display unit operable to display whether or not said image projection apparatus can project the respective image generated by said respective image generating apparatus of said plurality of image generating apparatuses, based on a result of the analysis of said analyzing unit” (see Section V. of Applicant's Remarks; Pages 16-18).

While Masahiro et al. (JP 2003-330436) teaches a projector receiving instructions for the projection of a composite image from a plurality of external image generating systems, it fails to teach or reasonably suggest that the projector have a means of generating and transmitting information related to a status of communication between the plurality of image generating

apparatuses and the image projecting apparatus to be received by the plurality of external image generating apparatuses and that the image generating apparatuses each have at least “a display unit” operable to display said information from the projector to the user.

While Nagano et al. (Pub. No.: US 2004/0130568 A1) teaches a network interactive display device having a plurality of image generating systems and a projector device for projecting a composite image of the images generated by said image generating systems an a connection status management system, it fails to teach or reasonably suggest that the projector have a means of generating and transmitting information related to a status of communication between the plurality of image generating apparatuses and the image projecting apparatus to be received by the plurality of external image generating apparatuses and that the image generating apparatuses each have at least “a display unit” operable to display said information from the projector to the user.

Based on the above evidence, as several representatives of the closest prior art of record, Examiner judges that the prior art of record fails to reasonably suggest, alone or in combination, the above cited limitation of Claims 10-11, rendering said claim allowable.

With respect to Claims 12-13, a plurality of image generating systems in communication with an image projecting apparatus projecting a composite representation of the images provided by the plurality of image generating systems, wherein the image projecting apparatus includes “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses”, “a beacon generating unit operable to generate information related to the status of communication

monitored by said status monitoring unit”, and “a transmitting unit operable to transmit the information generated by said beacon generating unit to said plurality of image generating apparatuses and to cause each respective image generating apparatus of the plurality of image generating apparatuses to display whether or not said image projecting apparatus can project the respective image”, or the associated system having computer-readable medium executing a program operable to execute the above steps, renders the claim allowable.

While Masaki (JP 2002-271337) teaches a system comprising a plurality of external systems (printers) and a single image generating device in radio communication and that each of the external systems comprises a monitoring system for registering the status of said radio communication between the external devices and the image generating system and transmitting said status to the image generating system, it fails to teach or reasonably suggest that the system be applied in a system comprising single projector and a plurality of image generating apparatuses such that the projector have “a transmitting unit operable to transmit the information generated by said beacon generating unit to said plurality of image generating apparatuses **and** to cause each respective image generating apparatus of the plurality of image generating apparatuses to display whether or not said image projecting apparatus can project the respective image” (see Section V. of Applicant's Remarks; Pages 16-18).

While Masahiro et al. (JP 2003-330436) teaches a projector receiving instructions for the projection of a composite image from a plurality of external image generating systems, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and

“a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating apparatus each have at least “a display unit” operable to display said information from the projector to the user.

While Nagano et al. (Pub. No.: US 2004/0130568 A1) teaches a network interactive display device having a plurality of image generating systems and a projector device for projecting a composite image of the images generated by said image generating systems an a connection status management system, it fails to teach or reasonably suggest that the projector have a communication monitoring system comprising at least “a status monitoring unit operable to monitor a status of communication between said image projecting apparatus and said plurality of image generating apparatuses” and “a beacon generating unit operable to generate information related to the status of communication monitored by said status monitoring unit” and that the image generating apparatus each have at least “a display unit” operable to display said information from the projector to the user.

Based on the above evidence, as several representatives of the closest prior art of record, Examiner judges that the prior art of record fails to reasonably suggest, alone or in combination, the above cited limitation of Claims 12-13, rendering said claim allowable.

With respect to Claims 2-6 and 8, the claims are rendered allowable based on their dependency upon the allowable independent Claims 1 and 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

INQUIRY

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jori S. Byrne-Diakun whose telephone number is (571) 270-7555. The examiner can normally be reached on 7:30 AM to 5 PM EST, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/J. S. B./
Examiner, Art Unit 2878
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/Georgia Y Epps/
Supervisory Patent Examiner, Art Unit
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